

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) An optical scanner for deflecting a plurality of light beams at a given wavelength λ from a light source towards a surface to be scanned, said scanner including at least one optical element having a surface which reflects said light beams, said surface comprising a thin film in which the reflectance of s-polarized light at said given wavelength and p-polarized light at said given wavelength differ by no more than 3.0% over any incidence angle in the range of 0-60°.
2. (Original) The optical scanner of claim 1 wherein said difference is no greater than 1.9%.
3. (Original) The optical scanner of claim 2 wherein said thin film comprises a first, outermost layer of SiO₂, a second layer of TiO₂, and a third layer of SiO₂, and wherein the reflectance of said second layer is higher than the reflectance of each of said first and third layers.
4. (Original) The optical scanner of claim 1 wherein said difference is no greater than 0.16%.

5. (Original) The optical scanner of claim 4 wherein said thin film comprises a layer of MgF_2 having a thickness less than 0.25λ .

6. (Original) The optical scanner of claim 5 wherein said thickness is about 0.22λ .

7. (Currently Amended) An optical scanner for deflecting a plurality of light beams at a given wavelength λ from a light source towards a surface to be scanned, said scanner including at least one optical element having a surface through which said light beams are transmitted, said surface comprising a thin film in which the reflectance of s-polarized light at said given wavelength and p-polarized light at said given wavelength differ by no more than 3.0% over any incidence angle in the range of $0-60^\circ$.

8. (Original) The optical scanner of claim 7 wherein said difference is no greater than 0.19%.

9. (Original) The optical scanner of claim 8 wherein said thin film comprises a first, outermost layer of MgF_2 , a second layer of ZrO_2 , and a third layer of Al_2O_3 .

10. (Original) The optical scanner of claim 9 wherein the reflectance of said second layer is greater than the reflectance of each of said first and third layers.

11. (Original) The optical scanner of claim 9 wherein said second layer has a thickness less than 0.50λ .

12. (Original) The optical scanner of claim 11 wherein said thickness is about 0.45λ .

13. (Original) An optical scanner comprising:
a light source for emitting a plurality of light beams in which a polarization direction of at least one of the light beams is different from polarization directions of the other light beams;

a deflector for deflecting the plurality of the light beams emitted from the light source to scan the light beams over a surface to be scanned; and

an optical surface provided between the light source and said surface to be scanned in the optical paths of the light beams, the optical surface having a reflectance for s-polarized light and a reflectance for p-polarized light that are substantially the same at a predetermined incident angle to the optical surface.

14. (Original) The optical scanner of claim 13, wherein said optical surface is provided on a reflection-type optical element.

15. (Original) The optical scanner of claim 14, wherein said optical surface is provided on a polygon mirror.

16. (Original) The optical scanner of claim 14, wherein said optical surface is provided on a mirror located between the light source and the deflector.

17. (Original) The optical scanner of claim 14, wherein said optical surface is provided on an imaging mirror.

18. (Original) The optical scanner of claim 13, wherein said optical surface is provided on a transmission-type optical element.

19. (Original) The optical scanner of claim 18, wherein said optical surface is provided on a imaging lens.

20. (Original) The optical scanner of claim 18, wherein said optical surface is provided on a glass window.

21. (Original) The optical scanner of claim 18, wherein said optical surface is provided on a collimator lens.

22. (Original) The optical scanner of claim 18, wherein said optical surface is provided on a cylindrical lens.

23. (Original) The optical scanner of claim 13, wherein the difference between the reflectance for s-polarized light and the reflectance for p-polarized light is not more than 3%.

24. (Previously Presented) An optical scanner for deflecting a plurality of light beams at a given wavelength λ from a light source towards a surface to be scanned, said scanner including at least one optical element having a surface which receives said light beams, said surface comprising a thin film in which the reflectance of s-polarized light at said given wavelength and p-polarized light at said given wavelength differ by no more than 3.0% over any incidence angle in the range of 0-60°.

25. (Previously Presented) The optical scanner of claim 1, wherein a polarization direction of at least one of the light beams is different from polarization directions of the other light beams.

26. (Previously Presented) The optical scanner of claim 7, wherein a polarization direction of at least one of the light beams is different from polarization directions of the other light beams.

27. (Previously Presented) The optical scanner of claim 24, wherein a polarization direction of at least one of the light beams is different from polarization directions of the other light beams.